



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/700,110

11/03/2003

Jerome J. Boogaard

MH1.237

5139

23893

7590

08/07/2006

TIMOTHY E SIEGEL
1868 KNAPPS ALLEY
SUITE 206
WEST LINN, OR 97068

EXAMINER

BERTRAM, ERIC D

ART UNIT

PAPER NUMBER

3766

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/700,110

Applicant(s)

BOOGAARD ET AL.

Examiner

Eric D. Bertram

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-13 and 15 have been considered but are moot in view of the new ground(s) of rejection. However, the Examiner will still address some of the general issues presented by the Applicant.
2. The applicant argues that the term "set" has a definite, well-accepted meaning to those of ordinary skill that requires a "settable" material to fixidly encapsulate a respective element. While this is indeed one interpretation of the term "set," any and all terms in a claim are to be given its broadest reasonable interpretation in light of the specification (see *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023,1027-28 (Fed. Cir. 1997)). In this case, upon reviewing the specification, it merely states that a set or plurality of first conductive wires are set into a structure of insulative material (page 1, line 22 and page 2, line 30), with no further description of what being "set" into an insulative material entails. Therefore, given its broadest reasonable interpretation, the term "set" can merely mean to be placed in an insulative material.
3. Furthermore, the applicant is arguing that, as recited in claims 1 and 15, the plurality of conductors are set within the insulative material before a portion of the insulative material is removed. However, there is no claim language that requires the steps to be carried out in the order they are written. It is entirely possible that a portion of insulative material may be removed first, so that once a conductive wire is set into the material, the wire is exposed.

Claim Rejections - 35 USC § 112

4. The amendment to claim 4 to overcome the 112(2) rejection is acknowledged and accepted. Accordingly, the 112(2) rejection of claims 4 and 5 are withdrawn.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 6, 8, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Osypka (US 5,251,643). Osypka discloses a stimulus cable assembly and a method for manufacturing the same. Osypka shows a cable portion in figure 6 that contains a plurality of conductive wires 3 and 4 that are set into insulative material 9, such that the wires are disposed at the same radial depth, as shown in the figure (Col. 8, lines 52-63). Furthermore, Osypka removes a portion of the insulative material to create an opening 7B, which only exposes conductive wire 3, which is then welded or soldered to conductor 7. There is a second conductive wire 6 that is electrically connected to the exposed wire 3 by welding or soldering the wire 6 to conductor 7 as well (Col. 8, line 65-Col. 9, line 6). As shown in figure 6, the second conductive wire is wrapped about the cable portion, and, finally, a conductive ring 5 is placed onto the cable portion and is electrically connected to the wire 6 through welding or soldering (Col. 9, lines 6-8).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osypka in view of Mueller (US 5,514,172). Osypka, as described above, discloses the applicant's basic invention, including welding a second conductive wire to a conductive

ring in order to form an electrical connection. Osypka does not, however, disclose the second conductive wire being wrapped around the cable prior to being connected with the ring electrode. Attention is directed to the secondary reference of Mueller, which in figure 4, shows wire 114 wrapped about the cable portion and connected along the length of the wrapping to a substantial portion of the circumference of ring electrode 38. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method of Osypka by wrapping the wire around the cable prior to adding the ring electrode in order to create a secure electrical connection, as taught by Mueller (Col. 4, lines 7-9).

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osypka in view of Mueller and further in view of Doan et al. (US 4,944,088, hereinafter Doan '088). Osypka, as described above, discloses the applicant's basic invention, including welding a conductive wire to a conductive ring in order to form a ring electrode. However, Osypka does not specifically disclose using laser welding to electrically connect the wire and ring. Attention is directed to the secondary reference of Doan '088, which discloses a ring electrode 18 that is electrically connected to conductor 54 through the process of laser welding (Col. 5, lines 15-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method of Osypka by using laser welding to electrically secure the ring electrode since this is an old and well known method in the art for electrically connecting a ring electrode and a conductor, as taught by Doan '088.

12. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osypka in view of Doan '088. Osypka, as described above, discloses the applicant's basic invention, including welding a conductive wire to a conductive ring in order to form a ring electrode. However, Osypka does not specifically disclose using laser welding to electrically connect the wire and ring. Attention is directed to the secondary reference of Doan '088, which discloses a ring electrode 18 that is electrically connected to conductor 54 through the process of laser welding (Col. 5, lines 15-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method of Osypka by using laser welding to electrically secure the ring electrode since this is an old and well known method in the art for electrically connecting a ring electrode and a conductor, as taught by Doan '088.

13. Claims 12, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osypka in view of Doan (US 6,181,971, hereinafter Doan '971). Osypka, as described above, discloses the applicant's basic invention with the exception of removing a second portion of the insulative material in order to create an additional exposed first wire surface spaced apart from the initial exposed first wire surface. However, it is well known in the art that at times it is desirable to have more than one ring electrode on a cable assembly in order to stimulate multiple areas at the same time. Attention is directed to the secondary reference of Doan '971, which discloses multiple openings 26 through which wires 30 and 32 may pass in order to create multiple ring electrodes 42 (See figures 1 and 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the method of

Osyka by adding a second opening and exposed wire surface in order to provide an additional ring electrode spaced apart from the first ring electrode in order order to stimulate multiple areas at the same time as taught by Doan '971.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D. Bertram whose telephone number is 571-272-3446. The examiner can normally be reached on Monday-Thursday and every other Friday from 9-6:30.

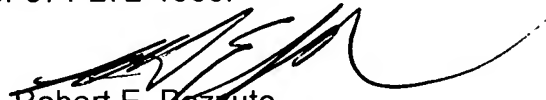
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on 571-272-6996. The fax phone

Art Unit: 3766

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric D. Bertram
Examiner
Art Unit 3766



Robert E. Pezzuto
Supervisory Patent Examiner
Art Unit 3766

EDB